

DRAFT

**CITY OF DETROIT
BROWNFIELD REDEVELOPMENT AUTHORITY**

**MICHIGAN PUBLIC ACT 381 WORK PLAN
TO CONDUCT MDEQ AND MEGA
ELIGIBLE ACTIVITIES**

**@ WATER LOFTS NORTHEAST
DETROIT, MICHIGAN**

for

**@ WATER LOFTS, LLC
DETROIT, MICHIGAN**

AUGUST 29, 2006

Approved by MDEQ on: _____

Approved by MEGA on: _____

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**WORK PLAN TO CONDUCT
MDEQ AND MEGA
REDEVELOPMENT ACTIVITIES**

**@WATER LOFTS NORTHEAST
DETROIT, MICHIGAN**

1.0 INTRODUCTION

AKT Peerless Environmental Services (AKT Peerless) has prepared this combined Environmental and Non-Environmental Work Plan for the eligible property (“Property” or “subject property”) located at 1461 E. Atwater Street and 1471 E. Atwater Street (Ward 7/Item 000007 and Ward 7/Item 000008) in the City of Detroit, Wayne County, Michigan. See Figure 1 for a site location map. See Figure 2 for property survey map. The Detroit City Council amended the City of Detroit Brownfield Redevelopment Authority Brownfield Plan to include the Project as hereinafter defined on **October 18, 2006** (refer to Appendix A for a copy of the approved Brownfield Plan).

@water Lofts Northeast (“the project”) will be the second of a three-phased development and will be recognized as one of Detroit’s premier neighborhoods. The street level retail space along at the corner of E. Atwater and Riopelle Streets will be neighborhood oriented featuring coffee shops, small produce markets, cafes, and other services typically associated with urban neighborhoods. These flexible spaces will offer opportunities for national chain stores as well as local entrepreneurs.

Mid-rise residential towers will flank the north side of E. Atwater, creating access to the state’s first urban park, and local neighborhood businesses. The residents will enjoy a designated additional park space to the east and views of the Detroit River. All private and public parking for the @water Lofts development will be provided in mid-block structures hidden from view by storefronts and/or residential linear buildings at grade level. Convenient entrances to parking garages will be from side streets, minimizing their impact visually on Atwater and to the pedestrian traffic, while maintaining the integrity and the scale of the development. @water Lofts will be the nexus of the East Riverfront District. Strategically, the site will serve as a vital

activity center along E. Atwater Street, linking the outdoor GM Plaza and Promenade with the Tri-Centennial State Park and Harbor. This development will be executed with a dedication to quality that will help fulfill the vision shared by the City of Detroit, General Motors, the Detroit Riverfront Conservancy, and the State of Michigan, which together have stepped forward together to support these extraordinary projects. The Developer intends to apply for a single business tax credit equal to 10% of its eligible investment at the eligible property pursuant to Act 143 of the Public Acts of Michigan of 2000 and Act 228 of the Public Acts of Michigan of 1975, as amended.

Investment for the Project described in this Work Plan is estimated at approximately \$67 million in improvements to land and buildings. Based on the current site conditions, certain eligible activities are necessary to prepare the property for redevelopment. The following sections present site background information, current property conditions, the proposed non-environmental eligible activities, and the costs associated with the proposed activities.

1.1 ELIGIBLE PROPERTY INFORMATION

1.1.1 Location

The Property is located at 1461 E. Atwater Street and 1471 E Atwater Street, in an area of Detroit known as the "East Riverfront District". The Property currently consists of vacant undeveloped land that historically, over the last 100 years, has been used for industrial operations. The Property is situated between Riopelle Street to the east, E. Atwater Street followed by 1470 E. Atwater Street (proposed @water Lofts South Development) to the south, 1399 E. Atwater Street to the west, and vacated Guoin Street to the north. The Property encompasses approximately 3 acres, and is located in Township 2 South (T.2 S.), Range 12 East (R.12 E.), Wayne County, Michigan. Please refer to the Brownfield Plan located in Appendix A for the legal description. See Figure 1 for a Scaled Property Location Map. See Figure 2 for a Property Survey Map. See Appendix C for Site Photographs.

1.1.2 Current Ownership

The City of Detroit currently owns the Property

1.1.3 Proposed Future Ownership

@water Lofts, LLC plans on purchasing the Property. The Developer plans on retaining ownership of the property during the proposed redevelopment. As the Project progresses portions of the Property may be leased or sold to end-users. Contact information is as follows:

@water Lofts, LLC
78 Watson, Suite 100
Detroit, Michigan 48201
Contact Person: Dwight E. Belyue
Phone: 313-833-3600

1.1.4 Delinquent Taxes, Interest, and Penalties

No delinquent taxes, interest, or penalties are known to exist for the Property.

1.1.5 Existing and Proposed Future Zoning For Each Eligible Property

The Property is currently zoned for industrial use. Modifications in zoning will be necessary to accommodate the proposed mixed-use development. The Developer is currently in the process of completing the zoning modifications in accordance with the practices of the City of Detroit.

1.2 HISTORICAL USE OF EACH ELIGIBLE PROPERTY

The eligible property has been historically occupied by various industrial occupants including: Mill Construction (1897), Detroit Screw Works (1900-1902), D.S.R. Power House (1921-1930) Ambassador Steel, Coil Steel, Ainsworth Manufacturing (1949-2000), and the City of Detroit (200-2006). Historical operations since at least 1884 to 2006 have included: lumber storage, coal driven powerhouse, railroad right-of-way, manufacturing, steel fabricating, painting and offices.

1.3 CURRENT USE OF EACH ELIGIBLE PROPERTY

The eligible property is currently vacant, undeveloped land. It is likely that subsurface construction debris from former buildings historically located on the eligible property may still be present.

1.4 SUMMARY OF PROPOSED REDEVELOPMENT AND FUTURE USE FOR EACH ELIGIBLE PROPERTY

@water Lofts Northeast will be the second of a three-phased development and will be recognized as one of Detroit's premier neighborhoods, providing street-level retail space, along the entire Atwater Street and Riopelle Street frontage. The retail space will be neighborhood oriented; boutique-scale offerings featuring coffee shops, dry cleaning, and small produce markets, cafes and other services typically associated with urban neighborhoods.

Mid-rise residential towers will flank the north side of E. Atwater Street and Riopelle Street, creating access to the state's first urban park and dedicated park space to the east. All private and public parking for the @water Lofts development will be provided in mid-block structures hidden from view by storefronts and/or residential linear buildings at grade level. Convenient entrances to parking garages will be from side streets, minimizing their impact visually on Atwater and to the pedestrian traffic, while maintaining the integrity and the scale of the development. Redevelopment plans are provided in Appendix D.

1.5 INFORMATION REQUIRED BY SECTION 15(15) OF THE STATUTE

1.5.1 Public Benefit

During the past eight years, the City of Detroit and General Motors have been the visionary champions of Detroit's East Riverfront. Commissioned in 2002 by the City of Detroit, Cooper Robertson Associates created a master plan for the East Riverfront District, providing the guiding principals for infill development. More recently, the City of Detroit and GM have assembled a group of private corporations, foundations and governmental stakeholders to form the Detroit Riverfront Conservancy. The goal of the conservancy is a creation of the Detroit Riverwalk, a pedestrian and bicycle pathway that will provide unrestricted public access to the Detroit River from Hart Plaza to Belle Isle. The transformation of Detroit's East Riverfront zone has been envisioned, and is being executed, on a scale rarely seen before. @water Lofts will be the nexus of the East Riverfront District. Strategically, the site will serve as a vital activity center along Atwater Street, linking the outdoor GM Plaza and Promenade with the Tri-Centennial State Park and Harbor. The link between this development and the master plan will create an anchor development of a 24-hour urban neighborhood where residents can live, work,

and play. This reclaimed waterfront warehouse zone redevelopment is seen as the new core of this area and it will set a standard to promote further growth within the district.

1.5.2 Job Creation

Future job creation is expected within the retail and entertainment component of the project. The approximate 21,000 square foot retail space, at grade level along E. Atwater Street and Riopelle Street will be neighborhood oriented, boutique-scale offerings featuring coffee shops, dry cleaning, small produce markets, cafes and other services typically associated with urban neighborhoods. These flexible spaces will offer opportunities for national chain stores as well as local entrepreneurs. The proposed 21,378 square feet of gross leasable retail area is expected to provide between 60 and 90 fulltime service jobs and between 15 and 25 fulltime management and administrative positions. The fulltime jobs that are expected to result from this development are subject to the City of Detroit's Living Wage Ordinance, which requires the minimum hourly wage of an employee with fully paid comprehensive family medical coverage to be paid \$10.00/hr. and \$12.50 without benefits.

1.5.3 Unemployment Status

According to the Michigan Department of Labor and Economic Growth, Office of Labor and Market Information the annual average unemployment rate in January of 2006 for the County of Wayne was 8.9%, and in the City of Detroit 14.5%. At the same time the State of Michigan experienced a rate of unemployment of 7.1%. According to the Bureau of Labor Statistics report for January 2006, surrounding counties recently experienced rate of unemployment much less severe than the City of Detroit, including Oakland County at 6.1%, Monroe County at 6.5%, and Macomb County at 7.2%.

1.5.4 Contamination Alleviation

The eligible activities are intended to mitigate existing environmental conditions that present unacceptable exposures to users of the Property following redevelopment, and prevent exacerbation of existing contamination during redevelopment.

1.5.5 Private Sector Contribution

Investment is estimated at approximately \$67 million in improvements to land and buildings.

1.5.6 Cost Gap Comparison

See Appendix B.

1.5.7 Brownfield Creation

This Project will not create a new brownfield site.

1.5.8 Project Financial Data

See Appendix B.

1.5.9 Incentives

The total estimated cost of the eligible activities to be reimbursed through the capture of tax increment revenues is provided in Table 1. The Developer anticipates making an investment of approximately \$67 million in real property improvements on the Property. Redevelopment of the Property is expected to subsequently generate increases in taxable value and result in incremental taxable value beginning in 2011. A Neighborhood Enterprise Zone is also being sought. Finally, a Brownfield Redevelopment Single Business Tax Credit of approximately \$50 million is being sought. The Developer will finance all eligible activities under this Plan related to improvements on the Property.

1.5.10 Additional Information

None

2.0 CURRENT PROPERTY CONDITIONS

2.1 PROPERTY ELIGIBILITY

The Property is considered “eligible property” as defined by Act 381, Section 2 because (a) the Property was previously utilized for a industrial purpose; (b) it is located within the City of Detroit, a qualified local governmental unit under Act 381; (c)and (c) the Property is determined to be a facility as defined by Act 381.

The subject property was previously utilized for industrial purposes, and meets the definition of a “facility¹”. Therefore, the subject property is an “Eligible Property” as defined in Act 381. Facility contaminants related to historical industrial activities were identified at the eligible property. Soil and groundwater in this portion of the subject property must be removed due to the concentration and nature of these contaminants. AKT Peerless will verify the extent of contamination through soil verification samples once the excavation of this area has been completed.

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Under Part 201, a “facility” is defined as “any area, place, or property where a hazardous substance in excess of the concentrations which satisfy the requirements of Section 20120a(1)(a) has been released, deposited, disposed of, or otherwise comes to be located,” M.C.L. § 324.20101(1)(o). A “release” is defined to include “spilling” or “leaking” of a hazardous substance into the environment. In addition, a “release” includes the abandonment of containers or other closed receptacles containing hazardous substances, M.C.L. § 324.20101(1)(bb).¶

2.2 SUMMARY OF ENVIRONMENTAL CONDITIONS

The following environmental site assessments have been conducted on the eligible property.

2.2.1 Roy F. Weston, Inc. (May 1999) Phase II Environmental Site Assessment

Roy F. Weston Inc. (Weston) completed a Phase II Environmental Site Assessment in May 1999 for the City of Detroit at the eligible property. Weston’s investigation identified the eligible property as a “facility” as defined by Part 201 of NREPA, Michigan PA 451 of 1994, as amended, based on the following information.

Five subsurface soil samples, two surface soil samples, and three groundwater samples were collected at 1461 E. Atwater. The following constituents exceeded the MDEQ generic residential cleanup criteria for soil and groundwater:

- Benzo(a)pyrene at a maximum concentration of 10,900 µg/Kg was detected in soil samples collected at GP-51 and GP-52 at concentrations exceeding the GRCC direct contact criteria (DCC) of 2,000 µg/Kg;
- fluoranthene at a maximum concentration of 19,100 µg/Kg was detected in soil samples collected at GP-51 at concentrations exceeding the GRCC groundwater to surface water interface protection (GSI) Criteria of 5,550 µg/Kg;
- naphthalene at a maximum concentration of 1,440 µg/Kg was detected in soil samples collected at GP-51 at concentrations exceeding the GRCC GSI Criteria of 870 µg/Kg;
- phenanthrene at a maximum concentration of 10,900 µg/Kg was detected in soil samples collected at GP-51 at concentrations exceeding the GRCC GSI Criteria of 5,300 µg/Kg; and
- arsenic at a maximum concentration of 38,600 µg/Kg was detected in soil samples

¹ Under Part 201, a “facility” is defined as “any area, place, or property where a hazardous substance in excess of the concentrations which satisfy the requirements of Section 20120a(1)(a) has been released, deposited, disposed of, or otherwise comes to be located,” M.C.L. § 324.20101(1)(o). A “release” is defined to include “spilling” or “leaking” of a hazardous substance into the environment. In addition, a “release” includes the abandonment of containers or other closed receptacles containing hazardous substances, M.C.L. § 324.20101(1)(bb).

collected at GP-51 and GP-52 at concentrations exceeding the GRCC DCC of 7,600 µg/Kg.

- Benzo(a) anthracene at a maximum concentration of 17.6 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC drinking water protection (DWP) Criteria of 2.1-8.5 µg/L;
- benzo(a)pyrene at a maximum concentration of 25.2 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC DWP Criteria of 5.0 µg/L and the GRCC groundwater contact criteria (GCC) of 1.0 µg/L;
- benzo(a)fluoranthene at a maximum concentration of 15.4 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC DWP Criteria of 2.1-8.5 µg/L and the GRCC GCC of 1.0-1.5 µg/L;
- benzo(g,h,i)perylene at a maximum concentration of 16.8 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC DWP Criteria of 0.26 µg/L and the GRCC GCC of 1.0 µg/L;
- chrysene at a maximum concentration of 19.4 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC DWP Criteria of 1.6 µg/L and the GRCC GCC of 1.6µg/L;
- dibenzo(a,h)anthracene at a maximum concentration of 4.35 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC DWP Criteria of 2.0 µg/L and the GRCC GCC of 0.31-2.0µg/L;
- dibenzofuran at a maximum concentration of 4.31 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC GSI Criteria of 4.0 µg/L;
- fluoranthene at a maximum concentration of 29.4 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC GSI Criteria of 1.6 µg/L;
- indeno (1,2,3-cd-)pyrene at a maximum concentration of 10.7 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC DWP Criteria, the GSI, and the GCC of 0.20 µg/L;
- naphthalene at a maximum concentration of 15.8 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC GSI of 13 µg/L;
- phenanthrene at a maximum concentration of 25.8 µg/L was detected in groundwater samples collected at GP-51 at concentrations exceeding the GRCC GSI of 2.4 µg/L; and
- selenium at a maximum concentration of 7.0 µg/L was also detected in groundwater samples collected at GP-48 at concentrations exceeding the DSI Criteria of 5.0 µg/L.

In addition, two subsurface soil samples and a surface soil sample were collected at 1471 E. Atwater. Tetrachlorethene at a maximum concentration of 140 µg/Kg was detected in soil samples collected at GP-82 at concentrations exceeding the GRCC DWP criteria of 100 µg/Kg. In addition, arsenic at a maximum concentration of 13,600 µg/Kg was detected in soil samples collected at SS-07 at concentrations exceeding the GRCC DCC of 7,600 µg/Kg.

2.2.2 AKT Peerless' (September 2006) Phase I ESA

AKT Peerless conducted a Draft Phase I ESA on the Eligible Property. The Detroit Fire Department records for the eligible property located at 1461 E. Atwater Street indicate that between 1965 and 1993 several USTs were located on the subject property including:

- 1,000-gallon gasoline UST (removed)
- 6,000-gallon gasoline UST
- 1,000-gallon diesel UST
- 6,000-gallon diesel UST
- 5,000-gallon diesel UST (out of use starting 1987 and removed)
- 900-gallon gasoline UST (permanently out of use in 1992)
- 10,000-gallon class III UST
- 12,000-gallon diesel UST (out of use starting 1989)
- 5,500-gallon diesel UST (removed)

2.3 SUMMARY OF FUNCTIONALLY OBSOLETE OR BLIGHTED CONDITIONS

Not applicable to this Work Plan.

3.0 SCOPE OF WORK

3.1 ENVIRONMENTAL MDEQ ELIGIBLE ACTIVITIES

Laboratory analytical results from previous subsurface investigations (see Section 2.2.1) indicate that concentrations of the aforementioned constituents are present on portions of the subject property above MDEQ Part 201 Generic Residential Cleanup Criteria. Therefore, the property meets the definition of a “facility,” as defined in Part 201. Due to the nature of these contaminants, they must be removed and disposed in a licensed landfill.

The environmental eligible activities will include baseline environmental site assessment, due care and additional response activities as described in the following subsections. A detailed breakdown of the costs associated with each task is provided in Section 3.1.4.

Tax increment revenue will be captured by the Authority and used to reimburse the Developer for the cost of their environmental eligible activities completed on the property (see the Brownfield Plan in Appendix A).

3.1.1 Baseline Environmental Assessment

Phase II Subsurface Investigation

Based on the results of the former investigations, the proposed Phase I ESA, and in accordance with accepted industry practice, AKT Peerless will conduct a Phase II subsurface investigation at the subject property. The subsurface investigation will include at a minimum (1) drilling soil borings, (2) installing monitoring wells (if groundwater is encountered), (3) submitting soil and groundwater samples for laboratory analyses, and (4) preparing a report summarizing the results of the investigation.

Soil Boring and Sample Collection

To evaluate subsurface conditions at the subject property, AKT Peerless will drill soil borings and/or test pits. The number and location of the soil borings or test pits will be based on existing documentation of environmental conditions and the results of the Phase I ESA. During the investigation, AKT Peerless will submit select soil and groundwater samples for laboratory analysis of VOCs, PNAs, and Michigan metals. The depth of the soil borings will be determined based on field conditions. Samples collected during this investigation will be in lieu of verification samples from the excavation. The depths of soil samples collected during the investigation will be determined based on field conditions with a preference toward samples deeper than six feet below ground surface. In a typical boring, samples will be collected at approximately 8-10 feet, 10-12 feet, and 12-14 feet bgs.

AKT Peerless will either: (1) retain a drilling contractor to use hollow-stem augers and, or (2). Retain a contractor to conduct test pits. Soil samples will be visually inspected and a geologic log will be constructed. Each soil sample will be screened with a photoionization detector (PID). If hollow stem augers are used the driller will follow the American Standard Testing and Materials publication ASTM D-1586. While drilling with hollow-stem augers, soil samples will be collected in 5.0-foot-intervals using a 2-foot-long 2-inch-diameter split-spoon sampler.

AKT Peerless will request the local utility companies to mark on the ground surface the locations of buried utilities (e.g., electrical lines, telephone lines, sewers, water mains, and natural gas pipes). Before starting drilling operations, the property owner will provide AKT

Peerless with all available documents, drawings, and maps that indicate buried utility lines and USTs at the site, if necessary.

Soil samples will be collected in precleaned glass jars and stored following United States Environmental Protection Agency (USEPA) Publication SW-846 Method 5035/ASTM D4547-91, final version of March 26, 1998, *Testing Methods for Evaluating Solid Waste*. This publication includes guidelines for the *Soil Sample Collection and Methanol Preservation for Volatile Analysis*. The samples will be transported to a laboratory under chain-of-custody documentation in an ice-cooled container. Samples collected for VOC analysis will be preserved immediately with methanol.

Monitoring Well Installation and Groundwater Sample Collection

If groundwater is encountered at the subject property, AKT Peerless will retain a contractor to install monitoring wells. The number of monitoring wells will be based on the recognized environmental conditions and chosen to best characterize groundwater conditions at the subject property. The groundwater investigation will be conducted to assess due care issues and is not intended as a detailed hydrogeological investigation. Groundwater samples will be used to obtain approval for discharge to the city sewer. The data generated by this subsurface investigation may be submitted as supplemental information to this Act 381 Work Plan, and will be included in the “due care” plan. A more detailed breakdown of the costs associated with this task is provided later in this section.

The contractor will construct each monitoring well using polyvinyl chloride (PVC) riser and 5-foot-long PVC screen. During installation, the annular void between the well screen and the borehole will be filled with a none cementing, coarse-grained, silica sand filter pack (to a vertical position of one-foot above the well screen). A column of bentonite pellets will be placed above the sand filter pack to seal the annular void space. The remainder of the borehole will be backfilled with a bentonite grout.

After well installation, AKT Peerless will purge each well by evacuating at least three casing volumes of groundwater or purging the well dry. AKT Peerless will collect the sample after sufficient groundwater seeps into the well. Groundwater samples will be collected with a 2-

inch-diameter Teflon® bailer. Groundwater samples will be collected and stored following United States Environmental Protection Agency (USEPA) Publication SW-846, *Testing Methods for Evaluating Solid Waste*. The samples will be transported, in an ice-cooled container, to a laboratory for analyses.

Decontamination

AKT Peerless will instruct the drilling contractor to prepare a decontamination area for cleaning drilling equipment and sampling tools before drilling commences. The drilling company will steam-clean the drilling equipment (augers, spilt-spoons, and other equipment) in the decontamination area before drilling each borehole. AKT Peerless will decontaminate sampling equipment such as bailers, hand augers, and trowels. During soil and groundwater sampling, decontamination of sampling equipment (bailers, split-spoons, hand augers, and trowels) will be conducted in the following order:

- Washing and scrubbing the equipment with none phosphate detergent
- Rinsing the equipment with tap water
- Air drying the equipment

Surveying

After drilling activities are completed, the monitoring wells' location and top of casing elevation relative to existing monitoring wells will be measured. The depth to groundwater will be measured and this information will be used to construct a groundwater potentiometric map showing the estimated direction of groundwater flow.

Laboratory Analyses

AKT Peerless will submit the samples to a laboratory for analyses. Samples will be analyzed for parameters identified in the MDEQ Operational Memorandum No. 14 “*Analytical Parameters and Methods, Sample Handling, and Preservation for Petroleum Releases*” dated June 12, 1998. The soil samples collected for organic analyses will be immediately preserved in the field with methanol in accordance with USEPA Method 5035. The selected laboratory will use analytical methods according to MDEQ and USEPA approved protocols.

Phase II Subsurface Investigation Report Preparation

After completing the subsurface investigation and receiving, analytical results, AKT Peerless will prepare a report, which will include a summary of field activities, analytical results, discussion of procedures, site map with sampling locations, and discussion of results.

BEA Report Preparation

AKT Peerless' scope of work is based on Section 20126(1)(c) of Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, and MDEQ Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7(a) Compliance Analyses, dated March 11, 1999. AKT Peerless' scope of work to complete the BEA will be based on the following:

- Results of the Phase I Environmental Site Assessment
- Results of the Phase II Subsurface Investigation
- Proposed future use of the site
- Planned redevelopment activities
- Response activity plans, as appropriate, to demonstrate compliance with Section 20107a ("Due Care")

3.1.2 Due Care

To demonstrate compliance with Section 20107a ("Due Care"), AKT Peerless will outline minimum "response activity plans", which may be necessary during site use and ownership. These response activity plans will be included in the BEA. Response activities may include operation and maintenance activities to ensure the integrity of the site and evaluation of potential exposure pathways.

A "due care" plan will be completed in accordance with Section 20126(1)(c) of Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, and *Michigan Department of Environmental Quality (MDEQ) Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7a Compliance Analyses*, effective March 11, 1999. This report will be prepared with a summary of the due care activities conducted, an analysis of exposure pathways, and an update regarding the status of redevelopment. A more detailed breakdown of the costs associated with this task is provided later in this section.

3.1.3 Additional Response Activities

Health and Safety Plan

AKT Peerless will prepare a site-specific health and safety plan to (1) prevent the spread of contaminants and (2) protect workers and residents. The HASP will include the following elements:

- Authorized personnel and definition of responsibilities.
- Personal protective equipment
- Decontamination procedures.
- Work zone restrictions and delineations.
- Personal protection upgrade/downgrade action limits.
- Emergency information and telephone numbers.
- Incident documentation procedures.
- Contingency plans.

A site-specific Health and Safety Plan (HASP) will be completed for redevelopment activities at the site. The HASP will comply with appropriate guidelines including the following:

- Michigan Occupational Safety and Health Act
- Section 111(c)(6) of CERCLA
- Occupational Safety and Health Administration requirements 29 CFR 1910 and 1926
- Standard Operating Safety Guide Manual (revised November 1984) by the Office of Emergency and Remedial Response
- Occupation Safety and Health guidance manual for Hazardous Waste Site Activities (NIOSH/OSHA/USCG/EPA, DHHS [NIOSH] Publication No. 85-115, October 1985)

Removal of Impacted Soil and Dewatering Activities

During previously conducted environmental investigations of the property contaminant concentrations in the soil and groundwater were detected above MDEQ Part 201 Generic Residential Cleanup Criteria on the subject property. This area is approximately 472 feet wide by 280 feet long and will extend approximately 8 feet below ground surface. Approximately 50,000 cubic yards of soil will be removed from this portion of the subject property. AKT Peerless will provide oversight of soil removal activities and dewatering activities. Refer to Figure 3 for a site map with the approximate extent of the proposed excavation. The costs presented in this Work Plan include the transportation and disposal of contaminated soil. The cost associated with the excavation of the soil will be absorbed under site preparation costs funded by MEGA. A more detailed breakdown of the costs associated with these tasks is provided later in this section.

Verification soil sampling

Once the soil removal and dewatering response activities have been completed AKT Peerless will collect soil samples in accordance with the “Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria (S3TM)” published by the DEQ. Samples will be collected based on the area of the sidewalls and floor of the final excavation.

3.1.4 Cost

The estimated cost for the activities described in this section is \$1,591,900.00. A more detailed description of the costs associated with these activities is provided in the following table.

Task	Estimated Cost
Baseline Environmental Site Assessment Activities	
Project Management	\$8,500
Field Activities	\$6,500
Laboratory (Phase II ESA)	\$54,900
Drilling	\$8,500
Miscellaneous (e.g. field equipment, travel)	\$3,500
Phase II ESA Report Preparation	\$5,500
BEA Report Preparation (Category N)	\$3,500
Sub Total	\$90,900
Due Care and Additional Response Activities	
Storage Tank Removal	\$45,000
Transportation (\$7.50/cubic yard)**	\$375,000
Disposal (\$18/cubic yard)**	\$900,000
Dewatering and Disposal	\$100,000
Oversight (assuming 4 weeks)	\$17,000
Project Management	\$10,000
Laboratory (Verification Sampling)	\$25,500
Health and Safety Plan	\$1,500
Due Care Plan	\$7,000
Remedial Action Plan	\$20,000
Sub Total	1,501,000
Total	\$1,591,900

*Assumes 50,000 cubic yards of soil will be removed (excavation costs to be absorbed under site preparation funded under MEGA eligible activities)

**Cost may vary depending on soil moisture content and density

3.1.6 Contingency

Additional response activities may include the response to unexpected contamination. Though these are not expected, Brownfield sites may contain one or more of the following:

- Encountering free product.
- Encountering soil classified as hazardous waste
- Historical septic systems or other underground structures

Additional response activities may include the removal of unexpected contamination and/or the construction of an engineered barrier or cover. If unexpected contamination is encountered, MDEQ will be notified. Also, a request to amend the Act 381 work plan and budget may be submitted to MDEQ. A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during the redevelopment. The estimated cost for contingency factors is \$238,785.00.

3.2 NON-ENVIRONMENTAL MEGA ELIGIBLE ACTIVITIES

The potential non-environmental eligible activities will include site preparation, infrastructure improvements, demolition, lead and asbestos abatement, which are not response activities the same more fully described below.

1. Work Plan. The cost to prepare a work plan in accordance with Michigan Economic Development Corporation ("MEDC") is estimated at \$5,000.00.
2. State Work Plan Review Fee. The MEDC and MDEQ fee for review of the work plan is estimated at \$2,500.00.
3. Site Preparation. Site preparation activities will include necessary removal and relocation of on site utilities, removal of existing site improvements such as paving, curb and gutter, etc. and the removal of subsurface construction debris that is not an additional response activity. The estimated cost for site preparation activities is \$326,271.00.
4. Legal/Entitlement/Appraisal. The above listed activities require related legal, entitlement, and appraisal measures typical for a project of this nature. The estimated cost for these related activities is \$29,214.00
5. Engineering, Design, Surveying and Testing. The above listed activities require related engineering, design, surveying and testing measures typical for a project of this nature. The estimated cost for these related activities is \$105,164.00.

6. Interest. Interest incurred during the duration of Plan. The estimated cost for interest is \$559,000.00.
7. Contingency. A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during the redevelopment. The estimated cost for contingency factors is \$70,222.00.

4.0 SCHEDULE AND COSTS

The following subsections present the proposed schedule to complete the Project and the associated costs.

4.1 SCHEDULE OF ACTIVITIES

Project activities will commence in 2008 following the City of Detroit's Brownfield Redevelopment Authority (BRA), the Detroit City Council, the Michigan Economic Growth Authority (MEGA) approvals, and the completion of @water Lofts South. Completion of the Project is anticipated within 2 years of commencement depending on market conditions.

4.2 ESTIMATED COSTS

The itemized estimated costs to complete the Non-Environmental eligible activities including all labor, equipment, subcontractors, and materials under this Work Plan are provided in Section 3.0 above. The Eligible Activity costs contained in Table 1 attached provides a summary of the estimated costs to complete each task.

5.0 PROJECT COSTS AND FUNDING

The following subsections present the total estimated Project costs and the source and uses of funds.

5.1 TOTAL ESTIMATED PROJECT COSTS

The total cost of the Environmental and Non-Environmental Eligible Activities under this Work Plan are provided in Table 1. See Appendix B for financial data outlining the specific costs related to the redevelopment.

5.2 SOURCES AND USES OF FUNDS

The Developer anticipates making an investment of approximately \$67 million in real property improvements on the Property. Redevelopment of the Property is expected to subsequently generate increases in taxable value and result in incremental taxable value beginning in 2010. Tax increment revenue will be utilized to reimburse the cost of eligible activities. Table 2 provides an estimate of tax increment revenue. The Developer will finance all eligible activities under this Plan related to improvements on the Property.

6.0 LIMITATIONS

None.